

11-7: The Rational-Zero Theorem (Mind your p 's and q 's)

Warm-up: If p is a factor of 6 and q is a factor of 2, name all possible fractions for $\frac{p}{q}$.

Rational-Zero Theorem:

Question: What does that mean?

Example 1: Find all rational roots of $f(m) = 3m^3 + 13m^2 + 21m + 12$.

This can be useful in factoring.

Example 2: Factor $x^4 + 4x^3 - 17x^2 - 24x + 36$

Using the Rational-Zero Theorem:

1.

2.

3.

4.

Homework:

"It is better to know some of the questions than all of the answers." – James Thurber